

REMARKS

This is intended as a full and complete response to the Final Office Action dated June 27, 2003, having a shortened statutory period for response set to expire on September 27, 2003. Please reconsider the claims pending in the application for reasons discussed below.

On September 25, 2003, the Examiner and Keith Tackett discussed the Advisory Action that was mailed on September 24, 2003. Mr. Tackett proposed canceling the claims that do not specify that the processing chamber includes a feedthrough disposed in a feedthrough hole. The Examiner advised that Mr. Tackett should submit a response with the proposed amendments. This response provides the arguments and amendments that Mr. Tackett discussed with the Examiner.

Claim 120 is objected to. Claims 100-120, 122, and 123 are rejected. Applicants have canceled claims 100-120, 122, and 123. Applicants submit that the changes made herein reduce the issues for appeal.

Claim 121 is rejected under 35 U.S.C. § 102(b) as being anticipated by *Wang, et al.* (U.S. Patent No. 5,000,113). In the Advisory Action mailed September 24, 2003, the Examiner states that Applicants have not provided any alternative definition of the word "feedthrough," and therefore the claim, when given its broadest reasonable interpretation is anticipated by *Wang, et al.* Applicants respectfully traverse the rejection.

The Examiner asserts that feedthroughs 98/100/102 are fluidly connected to one or more channels 106. Applicants submit that *Wang, et al.* only shows and describes 98, 100, and 102 as holes connected to channel 106 (inlet bore 98, groove 100, annular groove 102) for purge gas (column 12, lines 56-68, Fig. 10). Even if holes 98, 100, and 102 are considered to be feedthroughs, as asserted by the Examiner, the Examiner has not shown that elements 98, 100, and 102 are disposed in feedthrough holes. The pending claims require both a feedthrough and a feedthrough hole in which the feedthrough is disposed. As *Wang, et al.* does not teach or suggest a feedthrough disposed in a feedthrough hole, *Wang, et al.* does not provide all of the limitations of the pending claims.

Wang, et al. does not teach, show, or suggest a processing chamber comprising a chamber body, a substrate support member disposed within the chamber body, a retaining ring coupled to the chamber body, wherein the retaining ring has a feedthrough hole formed therein, a chamber lid coupled to the retaining ring, wherein the chamber lid forms a fluid inlet, a fluid outlet, and a temperature control channel, and wherein the temperature control channel is fluidly connected to the fluid inlet and fluid outlet, and a feedthrough disposed in a feedthrough hole, wherein the feedthrough is fluidly connected to the temperature control channel, and wherein the feedthrough attaches the chamber lid to the retaining ring, as recited in claim 121. Applicants respectfully request withdrawal of the rejection of claim 121.

Claims 81-92 and 121 are rejected under 35 U.S.C. § 102(e) as being anticipated by *Crawley, et al.* (U.S. Patent No. 5,871,586). The Examiner states that *Crawley, et al.* describes a chamber lid assembly 7 connected to the retaining ring 8 by one or more feedthroughs (Figure 2). In the Advisory Action mailed September 24, 2003, the Examiner states that a portion of the retaining ring 8 (the lower portion in Figure 2) is connected with the lid by the feedthroughs 28. Applicants respectfully traverse the rejection.

Applicants submit that *Crawley, et al.* does not show or describe connecting injector assembly 8 to lid 7 by one or more feedthroughs disposed in one or more feedthrough holes. *Crawley, et al.* shows a gallery 28 in the injector assembly 8. As the gallery 28 is within the injector assembly 8, it cannot connect the injector assembly to the lid 7. Instead, *Crawley, et al.* states that an O-ring seal is provided between lid 7 and the injector assembly 8 (column 4, lines 13-15).

With respect to the connection between the lower portion of the retaining ring and the lid, *Crawley, et al.* teaches that the injector assembly 8 includes a tubular portion having cylindrical walls 14 and that three plates, 15, 17, and 19 are sealed across the tubular portion 14 (column 4, lines 17-27). As shown in Figure 2, the plates are connected to the cylindrical walls 14 of the injector assembly. There is no teaching or suggestion in *Crawley, et al.* to connect the injector assembly 7 to the lid by one or more feedthroughs disposed in one or more feedthrough holes.

Applicants submit that *Crawley, et al.* does not teach, show, or suggest a processing chamber, comprising a chamber body, a substrate support member disposed within the chamber body, a retaining ring having one or more feedthrough holes formed therein, one or more feedthroughs disposed in the one or more feedthrough holes, a chamber lid connected to the retaining ring by the one or more feedthroughs, the chamber lid comprising a first plate coupled to a second plate, wherein the first plate and the second plate form a temperature control channel, and a fluid inlet and a fluid outlet formed in the chamber lid, wherein the fluid inlet and the fluid outlet are fluidly coupled to the one or more feedthroughs, as recited in claim 81. Applicants respectfully request withdrawal of the rejection of claim 81 and of claims 82-92, which depend thereon.

Crawley, et al. does not show or describe a chamber lid attached to the retaining ring by a feedthrough in the retaining ring, as described in claim 121. Applicants submit that *Crawley, et al.* does not teach, show, or suggest a processing chamber comprising a chamber body, a substrate support member disposed within the chamber body, a retaining ring coupled to the chamber body, wherein the retaining ring has a feedthrough hole formed therein, a chamber lid coupled to the retaining ring, wherein the chamber lid forms a fluid inlet, a fluid outlet, and a temperature control channel, and wherein the temperature control channel is fluidly connected to the fluid inlet and fluid outlet, and a feedthrough disposed in a feedthrough hole, wherein the feedthrough is fluidly connected to the temperature control channel, and wherein the feedthrough attaches the chamber lid to the retaining ring, as recited in claim 121. Applicants respectfully request withdrawal of the rejection of claim 121.

Claims 93-99 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Crawley, et al.* As claims 93-99 include the limitations of claim 81, Applicants submit that claims 93-99 are patentable over *Crawley, et al.* for the reasons discussed above with respect to claim 81. Applicants respectfully request withdrawal of the rejection of claims 93-99.

In conclusion, the references cited by the Examiner, neither alone nor in combination, teach, show, or suggest the method or apparatus of the present invention. Having addressed all issues set out in the office action, Applicants respectfully submit

that the claims are in condition for allowance and respectfully request that the claims be allowed.

The prior art made of record is noted. However, it is believed that the secondary references are no more pertinent to the Applicants' disclosure than the primary references cited in the office action. Therefore, it is believed that a detailed discussion of the secondary references is not deemed necessary for a full and complete response to this office action. Accordingly, allowance of the claims is respectfully requested.

Respectfully submitted,



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